

In the Figures:

Please insert Figures 24A-24D attached hereto as **Exhibit 1**.

Please insert Figures 25A-25D attached hereto as **Exhibit 2**.

In the Claims:

Please amend claims 208, 213, 224, and 231 as follows:

- 208. (Twice Amended) A process for determining whether a chemical compound is an agonist of a mammalian GABA_BR1/R2 receptor which comprises contacting cells containing nucleic acid encoding, and expressing on their cell surface, the GABA_BR1/R2 receptor, wherein such cells prior to being transfected with such nucleic acid do not express the GABA_BR1/R2 receptor, with the compound under conditions permitting the activation of the GABA_BR1/R2 receptor, and detecting an increase in activity of the GABA_BR1/R2 receptor, so as to thereby determine whether the compound is an agonist of a GABA_BR1/R2 receptor, wherein the mammalian GABA_BR1/R2 receptor comprises a GABA_BR1 polypeptide and a GABA_BR2 polypeptide, which GABA_BR1 polypeptide has an amino acid sequence identical to the amino acid sequence shown in Figures 24A-24D (SEQ ID NO: 48) or Figures 25A-25D (SEQ ID NO: 49), and which GABA_BR2 polypeptide has an amino acid sequence (a) identical to the amino acid sequence shown in Figures 4A-4D (SEQ ID NO: 4) or Figures 23A-23D (SEQ ID NO: 47), or (b) encoded by a nucleic acid sequence identical to the receptor-encoding nucleic acid sequence contained in plasmid pEXJT3T7-hGABAB2 (ATCC Accession No. 203515) or in plasmid BO-55 (ATCC Accession No. 209104). --

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-213. (Twice Amended) A process for determining whether a chemical compound activates a mammalian GABA_BR1/R2 receptor, which comprises contacting cells producing a second messenger response and expressing on their cell surface the GABA_BR1/R2 receptor, wherein such cells prior to being transfected with such nucleic acid do not express the GABA_BR1/R2 receptor, with the chemical compound under conditions suitable for activation of the GABA_BR1/R2 receptor, and measuring the second messenger response in the presence and in the absence of the chemical compound, a change in the second messenger response in the presence of the chemical compound indicating that the compound activates the GABA_BR1/R2 receptor, wherein the mammalian GABA_BR1/R2 receptor comprises a GABA_BR1 polypeptide and a GABA_BR2 polypeptide, which GABA_BR1 polypeptide has an amino acid sequence identical to the amino acid sequence shown in Figures 24A-24D (SEQ ID NO: 48) or Figures 25A-25D (SEQ ID NO: 49), and which GABA_BR2 polypeptide has an amino acid sequence (a) identical to the amino acid sequence shown in Figures 4A-4D (SEQ ID NO: 4) or Figures 23A-23D (SEQ ID NO: 47), or (b) encoded by a nucleic acid sequence identical to the receptor-encoding nucleic acid sequence contained in plasmid pEXJT3T7-hGABAB2 (ATCC Accession No. 203515) or in plasmid BO-55 (ATCC Accession No. 209104) --

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-224. (Twice Amended) A method of screening a plurality of chemical compounds not known to activate a mammalian GABA_BR1/R2 receptor to identify a compound which activates the GABA_BR1/R2 receptor, wherein the mammalian GABA_BR1/R2 receptor comprises a GABA_BR1 polypeptide and a GABA_BR2 polypeptide, which GABA_BR1 polypeptide has an amino acid sequence identical to

Sub F4 }
the amino acid sequence shown in Figures 24A-24D (SEQ ID NO: 48) or Figures 25A-25D (SEQ ID NO: 49), and which GABA_BR2 polypeptide has an amino acid sequence (a) identical to the amino acid sequence shown in Figures 4A-4D (SEQ ID NO: 4) or Figures 23A-23D (SEQ ID NO: 47), or (b) encoded by a nucleic acid sequence identical to the receptor-encoding nucleic acid sequence contained in plasmid pEXJT3T7-hGABAB2 (ATCC Accession No. 203515) or in plasmid BO-55 (ATCC Accession No. 209104) which comprises:

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- (a) contacting cells containing nucleic acid encoding, and expressing on their cell surface, the GABA_BR1/R2 receptor, wherein such cells prior to being transfected with such nucleic acid do not express the GABA_BR1/R2 receptor, with the plurality of compounds not known to activate the GABA_BR1/R2 receptor, under conditions permitting activation of the GABA_BR1/R2 receptor;
- (b) determining whether the activity of the GABA_BR1/R2 receptor is increased in the presence of the compounds, and if it is increased;
- (c) separately determining whether the activation of the GABA_BR1/R2 receptor is increased by each compound included in the plurality of compounds, so as to thereby identify the compound or compounds present in such a plurality of compounds which activates the GABA_BR1/R2 receptor.

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-231.

(Twice Amended) A process for determining whether a chemical compound is an agonist of a mammalian GABA_BR1/R2 receptor, which comprises preparing a membrane fraction from cells which comprise nucleic

acid encoding, and expressing on their cell surface, the GABA_BR1/R2 receptor, wherein such cells prior to being transfected with such nucleic acid do not express the GABA_BR1/R2 receptor, separately contacting the membrane fraction with both the chemical compound and GTPγS, and with only GTPγS, under conditions permitting the activation of the GABA_BR1/R2 receptor, and detecting GTPγS binding to the membrane fraction, an increase in GTPγS binding in the presence of the compound indicating that the chemical compound activates the GABA_BR1/R2 receptor, wherein the mammalian GABA_BR1/R2 receptor comprises a GABA_BR1 polypeptide and a GABA_BR2 polypeptide, which GABA_BR1 polypeptide has an amino acid sequence identical to the amino acid sequence shown in Figures 24A-24D (SEQ ID NO: 48) or Figures 25A-25D (SEQ ID NO: 49), and which GABA_BR2 polypeptide has an amino acid sequence (a) identical to the amino acid sequence shown in Figures 4A-4D (SEQ ID NO: 4) or Figures 23A-23D (SEQ ID NO: 47), or (b) encoded by a nucleic acid sequence identical to the receptor-encoding nucleic acid sequence contained in plasmid pEXJT3T7-hGABAB2 (ATCC Accession No. 203515) or in plasmid BO-55 (ATCC Accession No. 209104).

See
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Marked-up versions of the Amendments showing changes made are attached hereto as **Exhibit 3**. Additions to the text are indicated by underlining; deletion are indicated by square brackets.